

Published

every month for Chicago Scouts by the Chicago Council, Boy Scouts of America.

DEC.  
1928

# Scoutcraft

VOL. 8

NO. 12



MERRY  
CHRISTMAS

E. ANDERSON

# Sporting Goods To Scouts

## At Special Discounts

• •

**SCOUT MASTERS** and Boy Scouts who are members of the Chicago Council may now purchase at wholesale prices any article of sporting goods carried by one of Chicago's leading and old established houses through a purchase agreement just made with them.

When you wish to buy anything in sporting goods come to Scout Headquarters at 37 So. Wabash Ave. The information clerk will provide you with a purchase order and direct you where to go. All purchases must be made in cash.

### SOME OF THE ARTICLES YOU CAN BUY

Bicycles, Football Equipment, Basketball Equipment, Camping Outfits, Vacuum Bottles, Flashlights, Roller Skates, Ice Skates and Hockey Clubs, Golf Equipment and many other Sporting Items

This is a very fortunate connection for the members of the Chicago Council. Any further information may be had from your Scout Master.

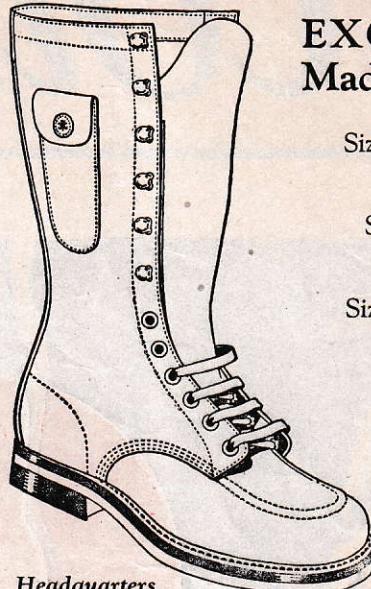
### READ PAGE

#### EXCELSIOR Made Hi-Cuts

Sizes 9 to 13½  
\$4.45

Sizes 1 to 6  
\$5.45

Sizes 6½ to 12  
\$6.45



Headquarters

OFFICIAL BOY SCOUT SHOES  
**MEDAL SHOE STORE**  
10th Floor  
37 South Wabash Ave.

FREE  
KNIFE

## EXCELSIOR

Official Boy Scout Shoes



A Shoe for  
Every Purpose

Service Shoe  
Camp Shoe  
Play Shoe  
Dress Shoe

The Official Boy Scout Service Shoe. Regular Army Type Blucher. MUNSON last. Soft, sturdy, strong uppers. Heavy double oak soles, or heavy overweight single soles, rubber heels. This is the ring leader of the gang. Built to give real comfort on the hike.

See Your Shoe Merchant  
or write

**EXCELSIOR SHOE CO.**  
1718 Republic Bldg.  
Chicago, Ill.

DEC.  
1928

# Scoutcraft

VOL. 8  
NO. 12

## COME HOME HUNGRY

By Lionel Chute

I think anybody will agree with me that when we go out into the wilderness we do not find things the same as they are at home and that we must learn a great many things before we can become first-class mountain campers. We who have wandered over the ranges many times know the joy of the trail, the courage-testing of the rocky peaks, the hot glare of the summer suns, the coolness of the rushing streams, the anticipation of the steaming grub in the evening.

Well I remember the first time we packed our bags for a hike. In the bottom we stowed two blankets and then filled them up with cans. Cans of beans rattled against cans of soup, layer on layer, high and heavy. We had heard how good meals taste in the great out-of-doors and we intended to make the most of our opportunities. Two boys helped us to get those packs on our backs, and before we had gone very far we wished we had two mules apiece to help us carry them.

After climbing the first hill we decided our packs must be too heavy, so we dug down and took one of our blankets out and cached it at a convenient ranch. At the next hill we left axes, extra clothes, etc., until finally when we arrived at camp we had hardly anything left but grub, and we were too tired to eat it. That night we were cold and couldn't sleep, and in the morning we were too cold to eat much.

### Just Enough is Plenty

Many times since then we have slung our packs and hit the trail, and many tough trips we have had. One by one we corrected our tenderfoot ideas of eating. I will tell you of an overnight trip we took a short time ago. We left Saturday afternoon. Our menu said we would have a camp dinner that night, a breakfast and a lunch for Sunday. In our packs when we left were blankets, towel, soap, pajamas, tents and upon top was a little package of grub. That night each one had a cup of hunter's stew, a large helping of oatmeal pudding, a sandwich and a cup of cocoa. We could have eaten a lot more, but still we were satisfied. Changing our plans, we climbed the mountain by moonlight, and on top we ate our lunch, an orange, another sandwich and a small piece of chocolate.

In the morning we woke up at 10 o'clock and had a breakfast of a large spoonful of cereal, apple sauce, a sandwich and cocoa. And when we were through and grub was all gone, we were still just a little bit hungry. Before we were ready to leave for home we were much hungrier, and thoughts of a nice, steaming home dinner made us anxious. All the way home we looked forward to getting something to eat and, boy, when we finally got there, didn't that meal taste good!

We were anxious to go, we felt good while we were there, and we were anxious to get home; that made a good hike.

A simple menu of good grub in concentrated form, and very little of it, is the secret known to those who have had long experiences in the mountains. When we meet a bunch of fellows coming home from beyond the ranges, and they are brown, lean and hungry-looking, we have a feeling that they know their stuff; that they are veterans of the game.

—Cedar Chips

## JUST A TENDERFOOT

I suppose you think because you are a Tenderfoot that you don't amount to very much in the Scout organization. Well, you are wrong.

In the first place there are more Tenderfoot Scouts than anything else in it. Our organization is consequently judged largely by how you carry yourselves.

In the next place every Scout has some time been a Tenderfoot, and what kind of a Scout he is now depends altogether on what kind of a Tenderfoot he made of himself then.

There are no short cuts in Scoutcraft. If you just skim through your Second Class work you may fool your Scoutmaster, you may even fool the Court of Honor and get a pin, but you cannot fool yourself.

Sometime and somewhere you are going to be put in a position which will show whether you know and can do it, and if you cannot, your wearing the pin which says you can will only deepen your shame.

You think perhaps that it is a small thing this becoming a Tenderfoot Scout. It is a very long step that you took, much harder than any other that you will ever take in Scoutcraft. Why? Because in doing so you took upon yourself an Oath, a holy promise to live a certain kind of life. The Second and First Class Scouts do not have to take any different Oath, because it is hard enough for any man or boy to keep this one. You see there are so many ways in which it can be broken, and so many people trying to get you to break it. They don't mean it that way, I know, but they do try and you have to watch out all the time, for your honor which you pledged is the dearest thing you will ever possess.

Stephen M. Major

## INSTANTLY, IF NOT SOONER

Rothschild, the rich merchant of Frankfort, calling to his office one of his employees, told him he was going to start a business in the United States and asked him how much time he would need before he could sail for San Francisco to undertake the work. The man thought a long time and then said, "About ten days, sir." "Very well," said Rothschild, "If I decide to send you, I will let you know." Then he called another man and repeated his words to him. "I would need three days," this man said. A third man was called. "I am ready at once," was his comment without a moment's hesitation. "Good," said the merchant. "From today you are a partner in our new firm in San Francisco and you will sail tomorrow. There will be many questions that will need quick and wise decision in such a venture." The man was Julius May, who became one of San Francisco's most successful and useful men, because he had cultivated a good "decider."

The double-minded boy, the half-hearted Scout, is always a failure. Be firm but not stubborn, decisive in thought and action.

By Frank H. Cheley in *Scouting for Leadership*

## Scoutcraft

Published Monthly by  
**The Chicago Council Boy Scouts of America**  
 37 South Wabash Avenue  
 Chicago, Illinois  
 Telephone State 3990

PRINTING OFFICE  
 638 Federal Street, Chicago, Ill.  
 Harrison 7517

Theodore Shearer, *Editor*

### Officers and Executive Staff

R. Douglas Stuart.....	President
Laurence B. Robbins.....	Chairman Executive Board
Mason Phelps.....	Vice President
Alfred W. Stern.....	Vice President
Le Roy T. Steward.....	Vice President
Franklin Bradley.....	Scout Commissioner
Carl J. Easterberg.....	Treasurer
Ernest H. Noyes.....	Sea Scout Commodore
H. W. Gentles, M. D.....	Scout Surgeon
E. Urner Goodman.....	Scout Executive
Theodore Shearer.....	Field Director
Alfred Nichols.....	Activities Director
Kenneth F. Beers.....	Financial Director
Mabel M. Willis.....	Office Secretary
A. R. Pieper.....	Chief Sea Scout Portmaster

### CITY WIDE COURT OF REVIEW

#### DECEMBER

EAGLE and PALM Court of Review, WEDNESDAY, December 26th, at SCOUT HEADQUARTERS, 37 South Wabash Avenue, Room 905, at 6:30 P. M. APPLICATIONS must be filed at HEADQUARTERS on WEDNESDAY, December 19th.

#### JANUARY

EAGLE and PALM Court of Review, WEDNESDAY, January 30th, at SCOUT HEADQUARTERS, 37 South Wabash Avenue, Room 905, at 6:30 P. M. APPLICATIONS must be filed at HEADQUARTERS on WEDNESDAY, January 23rd.

### NICHOLS NOW ACTIVITIES DIRECTOR

November 15th witnessed the arrival of a new man at Headquarters. Mr. Alfred C. Nichols, for years Program Director of the Philadelphia Council and director of the famous Treasure Island camps, assumed the position of Activities director succeeding Mr. Haun who is now on the Region Four staff in Ohio.

Mr. Nichols is himself an Eagle Scout and a fine camper. This last summer during his vacation he and seven other hardy campers went up into the Hudson Bay country and in canoes covered five hundred miles of territory mostly through rapid invested rivers.

Mr. Nichols will assume the role of Chief Camp Director at Owasippe and has already been to the camps. In addition he will be responsible for developing the new week-end camping facilities in the Forest Preserve, operation of the civic service corp and other Council Activities.

The Windy City welcomes a friend from the City of Brotherly Love. May the combination produce a peppy program in the year to come.

### SCOUTING DOES PAY

Scouting is like an education—the longer you stay with it, the more you get out of it. In grade school, even in high school, we learn fundamentals, but at college and in post-graduate work we begin to reap some of the rewards of our labors.

In Scouting it's just the same: the farther you go with it, the more will Scouting help you. Second class and first class ranks are important advancements, but when you hit on the Eagle trail it's then that Scouting begins to mean something.

When you're on your way to twenty-one merit badges, opportunities such as P. L., S. P. L. and different responsible positions in the troop are offered to you. Then, when you've been awarded that final badge, the highest rank in Scouting, look what a field of experience lies before you! Here's a few things that Eagles have done recently, and are to do in the near future:

#### For Eagles Only

Martin Johnson took three Eagles with him to Africa. Commander Byrd, after a nation-wide search, is taking an Eagle Scout to the South Pole with him.

Eight Chicago Sea Scouts went to Alaska last summer on John Borden's ship, the "Northern Light."

A patrol of six Seattle Eagles is to go to the International Jamboree in England next summer.

And so it goes; one chance after another for the best of experience in the world.

W. W., Seattle "Cedar Chips"

### ANOTHER GOOD MAN

Mr. Harold G. Edwards, Scoutmaster of Troop 578, has taken unto himself a wife—none other than Miss Sadie Swartz, the Girl Scout Captain of Troop 62. Now what do you know about that?

### OFFICIAL SCOUT SHOE STORE

Ready to Serve You

### GENUINE EXCELSIOR OFFICIAL SCOUT SHOES

The Scout Seal on Every Pair

Every member of the Chicago Council will profit by making a visit to this new Official Scout Shoe Store on the 10th floor, Champlain Bldg., 37 So. Wabash Ave.

Here you will be served by an Orthopedic expert insuring you a perfect fit. A complete display of Excelsior Official Scout Shoes and Hi-Cut boots await your inspection.

This store is making a generous opening offer to acquaint Scouts and their parents with the excellent quality of these shoes. The offer is good until Christmas.

With each pair of Field Service Shoes you receive Free One Ulster Official Scout Knife (value \$1.50).

With any of the other styles selected including the High Cut boots, you can have your choice of a large selection of pocket knives made by Ulster.

The officials of this store feel the quality and prices of these Excelsior made Official Scout shoes warrant the giving of a knife which will give lasting service and serve as a worthy advertisement for their store.

Get your order in early and have your shoes and knife delivered for Christmas.

### TROOPS 83 AND 88 A HIKING GO

St. Michael's Church, at Cleveland and Eugenie Streets, houses two troops that hike and want the world to know it. Their last hike used various means of transportation, street car, auto, train and pedal extremities. Their favorite hiking spot is "Gypsies' Landing" on the Fox river, near Elgin.

They won the District Court of Honor Trophy last quarter and like it so well they decided to keep it.

### GOOD JUDGMENT

"I've quit the Beaver patrol for good."

"Why did you quit?"

"I can't stay in it after what they did to me!"

"What did they do?"

"They kicked me out."

## BOY SCOUTS "DISCOVER" CHICAGO PUBLIC LIBRARY

The Boy Scouts have discovered the Chicago Public Library according to Mr. John F. Phelan, Chief of Branches of the Library and chairman of the reading program committee of the Boy Scouts. "At least they have discovered that the branch libraries contain the books they must read in order to pass their merit badge tests."

Recently the Library distributed to outlying branches 100 copies of each of the 71 Merit Badge pamphlets.

The West Side Drum and Bugle Corps has been doing some very fine work in the spring and summer of this year, thanks to the loyal support of three men: Mr. U. Leach (corps sponsor), Mr. M. W. Clark (drum major) and Mr. R. La Vine (corps manager) and also several of the corps itself. Some of the engagements this organization has had have been very prominent in Chicago social and sporting affairs. These were at the K. of C. world's championship basket ball games played at the 132nd regiment armory last spring. Also one of the big feats was at the Woodrow Wilson ball held in the Stevens hotel where the corps competed with a crack squad of picked R. O. T. C. men from Lakeview high school and were given as much applause and admiration as was the R. O. T. C. squad. The corps played at many other large gatherings such as football games, Scout Expositions and parades but the greatest feat of all was when it played in the Memorial Day parade last May 31st. This engagement brought the corps much applause and admiration. The members of the corps looked fine as they marched down Michigan Avenue in their uniforms, holding their heads straight to the front, bugles blaring and drums beating in perfect time. A very great honor to the corps was that they led the group of very proud old men known as the G. A. R.

Now as last month began a new year in the annals of the corps and the books have been gone over it was found that there are several vacancies for experienced drummers and buglers. If you are a fairly good bugler or drummer here's your chance to get into a very active organization.

The corps meets at the Jackson Blvd. Christian Church at the corner of Jackson Blvd. and Western Ave., on Monday nights at 7:00 o'clock sharp.

## 852 ENTERTAINS "MOM"

Troop 852, at the Unity Evangelical Church, staged a banquet and their mothers were the guests.

Considering the members of the troop had to demonstrate their ability at entertaining before mothers, they took a long chance on getting added work back home. Mr. Lauderdale, the Scoutmaster, certainly started something.

### And 892 Entertained "Pop"

Not so new as a novel stunt but something new for the dads of the Third Reformed Church where Troop 892 meets.

Scoutmaster Overby and the Scouts think it was a fine stunt and are going to make it an annual affair.

## SCOUT OFFICER GOES WITH BYRD

Walker Perkins, for three years Chairman of the Troop Committee of Troop 21 of the American Legion of Kenosha, Wisconsin, is now on his way to the Antarctic as supply officer on the "City of New York," supply ship for the Byrd polar expedition.

Mr. Perkins, the second representative of the Boy Scouts of America to be invited to take part in the expedition, has been active in Scout work for ten years, ever since joining a troop at Kenosha, Wisconsin, and is also a charter member of the first Sea Scout crew in Kenosha. The other Scout on the expedition is Sea Scout Paul Siple, of Erie, Pennsylvania, who was selected to accompany Commander Byrd as special orderly.

If we go forward we die,  
If we go backward we die,  
Better go forward and die.

—Baden Powell

## BOB McCULLOUGH, TROOP 888, RETURNS FROM TRIP THROUGH WEST

Eagle Scout Robert McCullough just completed a trip throughout the west, including Mexico. At Des Moines, Ia., he joined John Harshburger, a former member of Troop 888 who now lives in California. Bob spent a week at John's father's army post. His father is a captain in the cavalry and Bob got to do quite a bit of riding. He then went to Denver and visited relations. From there he headed south. The brother of one of his teachers at Senn took Bob about 2,000 miles through Arizona, New Mexico, and Mexico. Bob had many interesting experiences, one of which was the trading of an old scout knife for a hand made ring which was worth twice as much as the knife. The Indian, however, prized the knife enough to trade his silver ring. Bob had many more interesting experiences, too numerous to write here. At the end of the trip Bob figured that he had gone about 5,000 miles in 50 days. In Troop 888 Bob is Assistant Scoutmaster and honorary patrol leader of the Pine Tree Patrol. At camp this summer he was hikemaster at Dan Beard.

Eagle Scout W. Huguelet, S. P. L. No. 888



By The Radio Editor

It is the editor's intention to make this column of practical interest to every reader who is interested in radio. If you are in need of advice, or technical information, put your questions in a letter and address it to the radio editor. The answer will appear in this department.

## EXPLAINING THE MYSTERIES OF TELEVISION

By Paul Stephens

Associate Editor, WCFL Radio Magazine

(CONTINUED)

At the receiving station these impulses are again amplified and are fed into a kino lamp or neon tube—a bulb about the size of an ordinary radio tube. The element in the neon tube is flat and about one and a half inches square. The tube is filled with neon gas. The intensity of the glow of this tube varies instantly with the slightest fluctuation in the current.

By the use of the photo-electric cell and its kindred marvel, the neon tube, variations of light at the sending station can be reproduced instantly and faithfully at the point of reception.

When the photo-electric cell is placed in a circuit in series with a battery, the flow of current from one terminal to the other is very slight. However, when light is permitted to fall upon the potassium hydride coating its resistance is decreased and the flow of electricity is allowed to correspondingly increase. The slightest fluctuation in the light causes an equal variation in the current. These feeble electric fluctuations can be amplified until they are strong enough to be sent out over wires or broadcast by radio.

### Television Result of Long Search

However, conclusions must not be drawn too quickly from this phenomenon. Neither telephotography nor television is produced by it alone. Television is the result of the study and work of hundreds of scientists and inventors extending over nearly two generations.

When the final record is written, and due credit given each worker for his contribution, it may be found that some outside the realm of electricity deserve a bit of the glory.

(Continued on page eight)

# BOY SCOUT

## Greatest Scout Show Ever Produced

A Scout show as big as the circus and just as exciting. Thousands of spectators around the arena—pageantry—rapid fire pioneering—a colossal campfire—wild Indians—thrills—music—fun—scores of stunts all crowded into this one great breath-taking spectacle!

## Every Scout To Take Part

A blare of bugles—and all of Chicago's Scouts will march into the arena. Undoubtedly the greatest parade of Scouts ever seen in Chicago and perhaps the United States. You can't help being thrilled!

Because of the huge numbers of Scouts taking

part it has been necessary to set aside Friday, December 14th, as NORTH NIGHT with Scouts of the North Shore, North West and West Side Districts participating. Saturday night, December 15th, is to be known as SOUTH NIGHT with Scouts of the South Central, South West, South Shore, and Calumet districts participating.

## Awards For Advancement

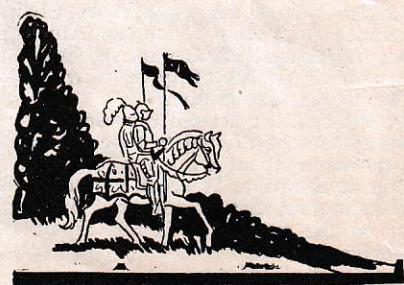
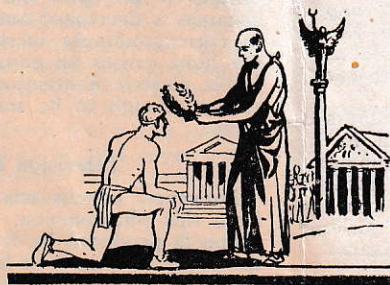
All new Candidate Scouts since September 1st will be invested as Tenderfoot Scouts at one time—thousands of them!

New Second Class Scouts and New First Class Scouts will receive leather neckerchief knots.

Troops that set Objectives in the Round-up and reached their goals will receive a beautiful leather trophy.

## Distinguished Guests

Mr. Walter Head, National President of the Scout organization, Dr. James E. West, Chief Scout Executive, and our own Chicago President, Mr. R. Douglas Stuart, as well as other members of the Executive Board, will be on the platform to welcome every Scout.



# COLISEUM

# JAMBOREE

## Every Scout Has A Job

This Great Scout Show MUST have a great audience! Each Scout has a part of this job. Therefore every Scout is being asked to dispose of tickets to his home folks, his relatives, his friends. YOU Scout, have a quota of five tickets to sell. Your Scoutmaster has these tickets and will provide you with them.

## Your Troop Can Secure Equipment

For faithful service there is always a reward. Your Troops reward for selling Jamboree tickets depends absolutely on your Scout, and your bud-

dies. Will the troop get that bunch of new pup-tents, that nested cooking outfit, that handicraft material? Every Scout doing his best means YES!

## Commission and Bonus

For every ticket sold and paid for before the time limit a commission of five per cent is to be paid.

In addition a bonus of an additional five per cent is to be paid on all tickets paid for by the last night of the Jamboree.

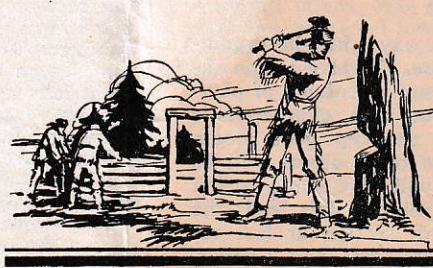
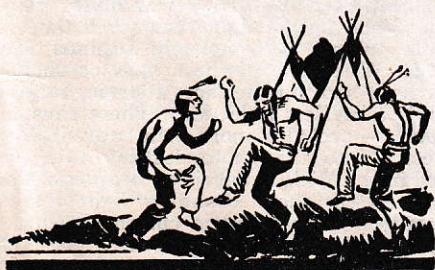
## Troop and Individual Prizes

### TO THE HIGH TICKET SELLING TROOP

First Prize . . . . .	\$25.00
Second Prize . . . . .	15.00
Third Prize . . . . .	10.00

### TO THE HIGH INDIVIDUAL TICKET SELLERS

First Prize . . . . .	\$15.00
Second Prize . . . . .	7.50
Third Prize . . . . .	5.00



**DECEMBER 14-15**



## THE LAST RACE OF THE SEASON

She was heeled down and driving along on the starboard tack. The northeast wind stiffened the spray on her sails and played wild music in the rigging. She stormed furiously through the cold waters and slashed her way across the line to the sound of triumphant cheers. Yet no crew clung to her icy deck, no voice roared orders from the helm. There was not a soul on board. In fact, a good husky sole—say size 10½—would have squashed the whole business.

She was the good sloop White Cap which cleaned up the last races for 30-inch models at the Southwest squadron's two meets in the middle of November. Southwest held an open meet in which two South Shore boats entered. The final scores show or, seem to show, Southwest to have a decided edge.

Boat	Skipper	Class	Points	District
White Cap	Sontag	30"	6	S. W.
Mallard	M. Johnson	30"	5	S. W.
Doris	Mack	30"	4	S. W.
No Name	Bergeson	30"	3	S. S.
Flying Cloud	T. Ryan	30"	2	S. S.

More than twice the number of models competed in races this year over last year, and many which were constructed did not race. This sport has made decided progress.

## THE COMMODORE'S CUP

The Kearsarge crew is the proud possessor of a silver cup big enough to hold the family wash. This is the Commodore's Cup donated by Regional Commodore E. F. Noyes and is emblematic of the cutter crew championship of Cook county. The cup was presented by Chief Portmaster Pieper at a recent Parents' Night at the Kearsarge quarters and was the source of considerable pride and rejoicing on the part of the crew and its backers.

The Kearsarge now has a fine crew of 52 members, most of them in uniform, and has made a very fine record in the short time it has been in action. The packing houses supplied a good meeting place and equipment and the ship committee is well organized and on the job. We wish other industrial organizations would please copy. Naturally, the favorable progress of the crew can be blamed largely on C. G. Crout, a skipper of ability. (We don't charge for this.)

## ATHLETICS

Sea Scout winter sports got under way with the organization of this year's basket ball league. Twelve teams entered and it looks like the busiest season yet. Lack of playing floors has been a handicap, but with characteristic cheery optimism the campaign for the cup goes along. Boxing and wrestling, swimming and other stunts will be organized as time cruises on. We will give some basket ball figures in our next issue. The John J. Zels leads the north section and Revenge the south section at last report, and are hotly challenged by Resolute and Corsair, respectively.

Old Ironsides pulled off a land cruise recently and discovered, after some original research work, that a fire of frozen wood goes out just as efficiently with two matches as with one, and that two blankets on the 1st of December

will keep one just as cold as they did when one was a tenderfoot scout years and years ago. O. I. invited the John Paul Jones along, but the J. P. J. troop got cold feet about the proposition. But children, cold feet ain't nuthin' to what some of the other guys got. A fine time was had nonetheless.

## SHIPPING NEWS

Four pulling boats will winter in the old Jackson Park launch house, and two more on the navy dock down town. Nokomis is still being worked on and the Commodore (Mr. Baker) and Steve Ram expect to bring her down town to put in the masts some time soon. She lies in the river north of Belmont avenue at present. The Idler will soon be going up the Calumet again and the water season will be closed until the day after Christmas, at least.

(TELEVISION—Continued from page five)

Perhaps honorable mention will be accorded Fox Talbot, who more than sixty years ago invented the half-tone process of photo engraving. Certainly a knowledge of Talbot's discovery helps one to understand how pictures are sent by television. Talbot's invention makes possible the reproduction of photographs and other pictures in newspapers and magazines. When a picture is to be reproduced by the half-tone process, a screen is placed over the camera lens—a coarse screen for a newspaper illustration and a finer screen for printing on coated paper. The screen divides the picture into thousands of tiny dots. In black portions of the picture the dots are very dark, in shaded portions they are gray and in the high lights the dots are faint. This is easily discerned when a half-tone illustration is viewed through a magnifying glass. There is a suggestion that Nature uses a similar process to accomplish the miracle of sight. The retina of the eye is composed of countless microscopic hexagonal cells, each with a nerve thread leading to the brain.

How to split up the picture to be broadcast into tiny segments, as is done in the case of photo engraving, was for a long time a stumbling block in the path of searchers after television. At present this is done with a perforated disc, called a scanning disc. Many experimenters contend that a better system must be sought.

The scanning disc is usually about twenty inches in diameter. The perforations are hardly larger than a pin and are arranged in a spiral near the rim. While the spacing between holes is equal, the spiral arrangement places each hole on a separate line or separate diameter.

Some engineers insist that for early amateur television experimenting, discs with only twenty-four holes should be used. Others claim that far better results are possible with 48-hole discs. Forty-five is another popular number. Station WCFL is now using a 48-hole disc, rotating at 900 revolutions per minute.

The scanning disc, decorated with its spiral of holes, is the characteristic insignia, emblem or sign of television, just as the outline of a "mike," a loud speaker or ear phones indicates radio. When the scanning disc is revolved so that its rim bisects the light from the projector, rays shine through the holes in the disc and fall with flickering effect upon the face of the person to be televised. With a disc such as WCFL uses, forty-eight lines of light flash across the face of the subject, each like a tiny searchlight traversing its own path. Each line of light recurs 900 times per minute. Thus the subject is completely scanned fifteen times each second. When one of these lines or shafts of light falls upon a light spot on the face, a strong reflection results. Dark spots cause less reflection. These constantly varying light impulses—probably more than two million per minute—are reflected into the photo-electric cells. Four such cells are used in the WCFL television broadcast equipment. As before stated, these changing light impulses cause similar variations in the electric current flowing between the terminals of the photo-electric cells. These electric impulses are greatly amplified and then fed into the regular radio broadcast apparatus.

At the receiving station, the radio impulses are again amplified and are then fed into a neon tube or kino lamp. The glow of this lamp varies faithfully with each fluctuation in the photo-electric cell.

When a disc, with holes in it similar to those in the scanning disc at the sending station, is rotated in front of the glowing kina lamp, so that the light will shine through the holes, and the speed of the two discs is synchronized, the image being broadcast appears to be reproduced on the face of the receiving disc. The image does not actually appear there—it is only an optical illusion. When the images are transmitted in sequence at a speed of fifteen per second the further optical illusion of motion is produced. The receiving disc must rotate in the opposite direction to that of the sending disc—television is a sort of winding and unwinding process, also one of the world's greatest bits of slight of hand.

—WCFL Radio Magazine

## GROUND SET WELL, HATHAWAY WARNS

Suggests Counterpoise as Possible Method to Overcome Handicaps

By K. A. Hathaway

A radio enthusiast should not condemn his radio receiving set until he has exhausted a supply of simple tests that might prove valuable in correcting an apparent deficiency.

Not the least among the causes of inefficient operation is the ground connection, and unfortunately that portion of the installation is too often treated lightly.

The new radio receiver may come into the house, be carefully placed in its nook, a good antenna installation made only to spoil the entire picture by "just hooking the ground on that radiator over there." "That radiator" may be just the place the ground connection should not be placed.

It can be safely said that the best ground connection is more likely to be one leading to a pipe or plate buried in the ground outside the building. It may not be feasible to do that in some of the apartment buildings, so that we must resort to other measures. The radiator is not the only part of the plumbing system that connects with the ground. There is the cold water system, the gas line, and the electric conduit. Although each of these systems may take a varied route they eventually are buried in the ground itself.

### May Be Phone Connection

Any one of them, preferably the heat pipes and the cold water pipes, may be used by the telephone company in making its ground connection. The cold water pipe is used more often for this purpose than is the heating system or the hot water plumbing.

If a radio set is connected to the same ground as the telephone system, there is a possibility although not a certainty, that radio operation will be hampered.

In making installations of electric refrigerators, some of the firms make certain that the motor is grounded, and again we find a source of interference that may cause havoc with radio reception.

It has been found in many cases that interference thought to arise from refrigerators, has been eliminated by moving the ground connection on the receiving set to another part of the plumbing system.

### Counterpoise System Suggested

Then, again, it may be found that the best reception can be obtained by using a counterpoise instead of a direct ground connection. A counterpoise is another wire placed a few feet below the antenna itself, stretched a few feet above the ground or the building.

The connection is made between the counterpoise and the ground connection on the receiver. Using the counterpoise while there is still the capacity between the antenna and the ground, the capacity that enters into the circuit is that between the antenna and the counterpoise. Experimentation may show some startling results when using this method of antenna and ground installation.

From these remarks, it would seem to behoove each and every radio listener to perform a few experiments by way of improving the operating characteristics of his set. The reference here does not apply to the tuning of distant station signals, though in the process of experimenting that feature may enter into the results in no small manner.

Copyright, 1928, The Chicago Daily News, Inc.

# AMATEUR Photography

This department is conducted by  
Mr. A. Flesch, Pres., Central Camera Company

## PHOTOGRAPHIC NIGHTS

By Albert Crane Wallace

When the days get shorter and the evenings longer there is good excuse for those evening-light recreations that we naturally associate with winter.

It is true that a Kodak can be busy on the shortest of days—that even bad-weather pictures can be fascinating.

Yet the fuller evening suggests a review of all that concerns our hobby. It suggests attention to filing, so that we may have quicker success in finding a desired negative.

After making our own prints we often have need of additional prints for friends, or for chance acquaintances to whom we remember promises made.

The fuller evening suggests printing and enlarging for which new conveniences are always being provided. New conveniences suggest adventures that amplify the pleasures growing out of the original film negative.

The album can be a revelation. There are ways to trim prints and ways to place them that sometimes seem to double the interest of the Kodak.

For the hours when the sun has left us, we can turn to making pictures by artificial light—the lamps that cheer the home or by flashlight. There is a special fascination in this phase of photography. With screens and reflectors we may feel that we have entered a romantic field of activity that can be an entertainment in itself.



## TYPESETS

By A. F. Gamber, Valley City, N. Dak.

Did you ever consider the possibilities of forming a collection of typeset precancels exclusively? Typesets are those printed from plates set up in a local printing office, instead of from the plate furnished by the government. Being thus set up locally, they are full of all sorts of errors, shifted letters, etc., and no two such plates are anywhere near alike. A collection of such precancels would be unusually striking and much more attractive and full of intriguing points than those printed from the regular government plates, as they are all alike, those in the same type, I mean. All U-1's are alike, so are all U-2's, etc., but no two typeset plates are anywhere near alike.

Just to illustrate the possibilities and the intriguing nature of these precancels, let me make a few illustrations. Corning, N. Y., at present uses a typeset plate, medium sized serifed capitals between three slight lines above and three below. It is one of the prettiest precancel types in existence, bar none. I never yet saw, or know of anyone else seeing a Corning typeset, that he didn't involuntarily say, "Isn't that the prettiest thing you ever saw?" Contrary to my observation made above, I have never seen a variation in the stamps printed from this plate. Rolling Fork, Mississippi, is another typeset town, it has used several different plates, as the assistant postmaster is also a printer, getting out a local paper and doing much job printing. At present this office is using a plate made up of small serifed capitals between two lines above and two

below, somewhat like Corning, but heavier. But in setting up the plate of 100 subjects, the printer ran short of some type. In one case he needed an L and substituted for it a capital I and period, thus I. In another place he ran short of capital I's and S's, so instead of MISS, it reads Miss. A pair showing one MISS and one Miss is very interesting. One often notes on this plate that some letters are shifted above or below the level of the others, too.

Ardmore, Pennsylvania, is another user of typesets, large capitals, ARDMORE PENNA with no lines or bars at all. Here again the printer ran short of certain letters, so we have ARDMORE in serifed capitals, again in plain, with PENNA plain or serifed. Once in a while we find both words in serifed caps, which is still more intriguing. And sometimes he put a period after PENNA and sometimes not. Altogether I have a bit over 20 Ardmore precancels, but only four values are represented in the twenty, the number being accounted for by the type variations. Wouldn't a whole sheet of Ardmore be a rare sight, and wouldn't it repay some study?

Brookville, Pa., has used two typeset types, one in small heavy serifed caps between heavy black bars, the other in larger, lighter caps, very much like U-12, the type now used by New Haven, Conn. I have never seen enough of either type to know what, if any variations exist in these two types.

Typesets are a good investment, because these typeset plates are often used only temporarily until the regular plate is received by the office ordering one. Connellsville, Pa., used such a typeset arrangement a few years back, because their plate hadn't arrived from Washington. They used small lower case type between very fine lines. I have just one stamp in that type, the black Harding reading down, which I valued at no less than \$10, because it is a unique specimen, and of course the plate was broken up long, long ago. One of the loveliest typesets is that used by the Brookings, S. Dak., office, medium sized lower case letters between lines. Paonia, Colorado, has used several of these types, every one seems to be just a bit lovelier than its predecessor.

Get out your collection and duplicates, segregate the typesets and see if you haven't enough to form the nucleus of a separate collection. Then go to it. Expect to experience a lot of difficulty in getting them, for they blossom forth about as often as the century plant. But boy, what a showing they do make when properly mounted! Write me if you have any precancel problems, perhaps I can be of assistance to you. I will be glad to try my hand, anyway.

—The Stamp Echo

## WHEN THE ICE BREAKS

Hazards on ice are seldom marked, so careful Scouts will warn beginners of the weak spots, spring holes, and other dangers. At the beginning and toward the close of the skating season, ice thickness is all important. One-inch ice is a good kind to stay off; ice two inches thick and still forming will support one skater, but in melting weather is dangerous. Three-inch ice made at very low temperature may be trusted by very small groups, but not crowds. Good, clear, black ice made in very cold weather and at least four inches thick is O. K., but when the ice has been on for a long time, with thaws and cold spells alternating, it becomes brittle and will hold but a small load. Salt water ice is always treacherous.

When spring melting sets in, quit the ice at the first sign of weakening. Place no dependence upon the good luck of rocks thrown from the shore.

### To Be Prepared

Careful Scouts, when they go skating, will for their own safety and the safety of others, look about them to see what would be available if someone breaks through the ice. Locate loose fence rails, a ladder, planks or a boat hauled out for the winter, or think where you saw a clothesline in a backyard. All these may be useful.

The thing to remember when a person gets in is that the weight of the rescuer must be distributed over as much of the ice as possible, hence planks and ladders. If the rescuer must push out from shore, a life-line wrapped around his

body, under the arms, should be payed out by others on the shore. A hockey stick, or something equally strong, fastened to a lifeline can be thrown out to the person in the water.

### When the Rescue Has Been Made

The first thing to do with the person rescued from icy water, if he is conscious is to get him into motion to keep him from freezing. Take him at once to shelter and apply first-aid for frost bite and to prevent pneumonia. If unconscious, treat as in any other case of suffocation, and start artificial breathing by the prone and pressure method, which the Red Cross recommends for all kinds of smothering, whether through gas, smoke, electric shock, or drowning. Always get a doctor promptly, but do not wait for him. Delay in starting to work on the rescued person robs him of any chance he may have of recovery.—Commodore W. E. Longfellow.

**Kinkead-Gillespie Company**

Designers-Printers-Binders  
Booklets-Catalogs-Publications

638 Federal Street  
Chicago

## GARDEN CITY STAMP COMPANY

Postage Stamps Bought and Sold

Superior Quality at Moderate Prices

Suite 314-16 108 N. Dearborn St. CEN-tral 5028

### BOOKS FOR CHRISTMAS

Recommended by the Boy Scouts of America

#### LIST OF BOOKS

The Exciting Adventures of Captain John Smith, by Vernon Quinn.	\$2.50
Published by Frederic A. Stokes.	
Andy Breakers' Trail, by Constance Lindsay Skinner.	\$1.75
Published by the Macmillan Co.	
The Short Sword, by Violet Irwin.	\$1.75
Published by the Macmillan Co.	
Count Billy, by Greville Mac Donald.	\$2.50
Published by E. P. Dutton & Co.	
The Red Rose of Dunmore, by Hawthorne Daniel.	\$2.00
Published by the Macmillan Co.	
Lenape Trails, by Clifton Lisle.	\$2.00
Published by Harcourt, Brace & Co.	
Bambi, by Felix Salten.	\$2.50
Published by Senion and Schuster.	
The Trumpeter of Kralow, by Eric P. Kelly.	\$2.50
Published by the Macmillan Co.	
Mutiny Island, by C. M. Bennett.	\$2.00
Published by E. P. Dutton & Co.	
Lola the Bear, by Henry Milner Rideout.	\$1.75
Published by Duffield & Co.	
Abe Lincoln Grows Up, by Carl Sanburg.	\$2.50
Published by Harcourt, Brace & Co.	
The Father of His Country, by William E. Barton.	\$2.00
Published by Bobbs, Merrill Co.	

#### FOR STAMP COLLECTORS

A complete line of Stamp Albums. You will find here just the type of book you want.

#### BRENTANO'S BOOK STORE

*The place where Scouts buy their books*

63 E. Washington St.

We are now in our New Home — remember the address

## A CHRISTMAS SUGGESTION

DAD and Mother will welcome the suggestion that you want a new official uniform for Christmas.

Your Official Outfitter has them.

## Loren Miller & Co.

*The Uptown Square Dept. Store*

*Broadway at Lawrence*

## Attention Scouts!

### Our Boys Section

*Second Floor*

### Offers Complete Outfits

*for Sports, School,  
Dress Wear*

*Also Regulation Scout Equipment  
and Supplies*

## CONN CHICAGO CO.



*The Academy Drum*

Highest Grade Band & Orchestra  
Instruments and Accessories

62 East Van Buren St.

Chicago

THE BOY SCOUT TRADING POST WISHES YOU

# A Merry Christmas

Make This A "Scouting Christmas"—Visit the  
Boy Scout Trading Post

## A Few Gift Suggestions

No. 1200. Wear Ever Official Scout Cook Kit.....	\$ 2.25	No. 3751. Official Christmas Cards, set of 12.....	\$0.50
No. 1212. Official Boy Scout Field Glasses .....	7.50	No. 1277. Official Boy Scout "Conn" Bugle.....	5.00
No. 1256. Scout Guard Rope .....	.50	No. 1537. "King" Bugle.....	6.00
No. 1278 Official Boy Scout Flashlight, Complete.....	2.50	No. 514. Official Leather Belt and Nickel Buckle.....	1.25
No. 1276. Official Boy Scout Knife, 4 Blades.....	1.50	No. 514A. Official Leather Belt and Silver Buckle.....	2.50
No. 1544. Elgin Wrist Watch .....	12.50	No. 1281. Official Boy Scout Whistles .....	.35
No. 1510. Official Boy Scout Axe with Sheath.....	1.80	No. 1422. Army Shelter Tent .....	3.75
No. 1437. Waterproof Match Box .....	.55	No. 1303. Featherweight Tent .....	4.90
No. 1207. Watch Case Compass .....	1.25	No. 1070. Official Boy Scout Lariat, 20 Ft.....	1.40
No. 573 Official Boy Scout Haversack .....	2.50	No. 321. First Class Scout Silver rings .....	.85
No. 1440. Metal Camp Mirror .....	.30	No. 323. First Class Scout Solid Gold Rings.....	5.50
No. 1548. Official Boy Scout First Aid Kit.....	.75	No. 1551. Six Foot Bow and Arrow Sets, Complete.....	10.75
No. 3011. Red Cross Hndbk .....	.60	No. 3100. Official Boy Scout Cloth Bound Handbook....	1.00
No. 3747. Game of Scouting .....	1.00	No. 3012. 1929 Boy Scout Pocket Diary .....	.15
No. 3637. Boy Scout's Book of Campfire Stories.....	2.50	Complete Scout Uniform.....	9.25
No. 1532. Yucca Fire Sets....	1.00		

## THE CHICAGO BOY SCOUT TRADING POST

37 South Wabash Ave.  
Corner Monroe and Wabash

CHICAGO, ILLINOIS

Controlled by the Boy Scouts of America—National Council

**"Open Evenings Until Christmas"**